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(1 of 2)

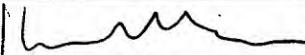
Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				<i>Complete if Known</i>	
				Application Number	09/106,565
				Filing Date	June 29, 1998
				First Named Inventor	Kenneth M. Martin
				Group Art Unit	2837
				Examiner Name	Karen Masih
Sheet	1	of	1	Attorney Docket Number	IMMR-083/01US

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MAY 24 2004

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
IL		6,160,489	12/12/2000	Perry et al.	
		5,690,582	11/25/1997	Ulrich et al.	
		5,575,761	11/19/1996	Hajianpour	
		5,437,607	8/1/1995	Taylor	
		5,436,622	7/25/1995	Gutman et al.	
		5,283,970	2/8/1994	Aigner	
		5,175,459	12/29/1992	Danial et al.	
		5,165,897	11/24/1992	Johnson	
		5,022,384	6/11/1991	Freels	
		4,885,565	12/5/1989	Embach	
		4,484,191	11/20/1984	Vavra	
		4,464,117	8/7/1984	Foerst	
		4,333,070	6/1/1982	Barnes	
		4,262,549	4/21/1981	Schwellenbach	
		4,127,752	11/28/1978	Lowthorp	

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS					
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
IL		ROSENBERG, "Virtual Fixtures: Perceptual Overlays Enhance Operator Performance in Telepresence Tasks," Ph.D. Dissertation, Stanford University, June 1994.			
		WIKER, "Teletouch Display Development: Phase 1 Report," Technical Report 1230, Naval Ocean Systems Center, San Diego, July 1988.			
		YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," Proceedings of the 1992 IEEE/RSJ International Conference on Intelligent Robots and Systems, Raleigh, NC, July 7-10, 1992			

Examiner Signature		Date Considered	7/6/04
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

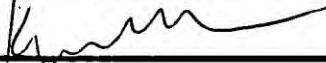
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U.S. PATENT DOCUMENTS				
Examiner	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number Kind Code ² (if known)		
1		2,998,822	8/1961	Souza
		3,942,147	3/1978	Josephson
		3,988,845	11/1976	Boatman
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		4,101,884	7/1978	Benton, Jr.
		4,232,724	11/1980	Brown
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		4,571,834	2/1986	Fraser et al.
		4,694,533	9/1987	Doyen
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		5,005,306	4/1991	Kinstler
		5,261,174	11/1993	Blegan
		5,297,057	3/1994	Kramer et al.

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First Named Inventor Kenneth M. Martin			
Group Art Unit 2837			
Examiner Name Karen Masih			

U.S. PATENT DOCUMENTS

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		Number	Kind Code ² (if known)		
<i>jw</i>	6,422,941	B1	Thorner et al.	07-23-2002	
	6,111,577		Zilles et al.	08-29-2000	
<i>J</i>	5,186,695		Mangseth et al.	02-16-1993	
<i>J</i>	2,972,140		Hirsch	02-14-1961	

FOREIGN PATENT DOCUMENTS

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² See attached Kinds of U.S. Patent Documents.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible.

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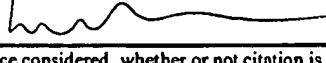
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	09/106,565
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				First Named Inventor	Kenneth M. Martin
				Group Art Unit	2837
				Examiner Name	Karen Masih
Sheet	2	of	3	Attorney Docket Number	IMMR-083/01US

OTHER - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
<i>KM</i>		AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.	
<i>KM</i>		BLISS, "Optical-to-Tactile Image Conversion for the Blind," IEEE Transactions on Man-Machine Systems, Vol. MMS-11, No. 1, pp. 58-65, March 1970.	
<i>KM</i>		CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," Bachelor of Science Thesis, MIT, June 23, 1983.	
<i>KM</i>		"Cyberman Technical Specification," Logitech Cyberman SWIFT Supplement, 4/5/1994.	
<i>KM</i>		EBERHARDT et al., "Inducing Dynamic Haptic Perception by The Hand: System Description and Some Results," DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1, ASME 1994, pp. 345-351.	
<i>KM</i>		GOBEL et al., "Tactile Feedback Applied to Computer Mice," International Journal of Human-Computer Interaction, Vol. 7, No. 1, pp. 1-24, 1995.	
<i>KM</i>		JOHNSON, "Shape-Memory Alloy Tactile Feedback Actuator," Armstrong Aerospace Medical Research Laboratory, AAMRL-TR-90-039, August, 1990.	
<i>KM</i>		KACZMAREK et al., "Tactile Displays," Virtual Environment Technologies, pp. 349-414.	
<i>KM</i>		KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," PRESENCE, Vol. 4, No. 4, pp. 387-402, 1995.	
<i>KM</i>		LAKE, "Cyberman from Logitech," GameBytes, 1994.	
<i>KM</i>		NOLL, "Man-Machine Tactile," SID Journal, July/August 1972 Issue.	

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				Examiner Name	Karen Masih
Sheet	3	of	3	Attorney Docket Number	IMMR-083/01US

16		OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95, Seoul, Korea, 21-24 August 1995, pp. 309-319.	
1		PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.	
✓		PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," Master of Science Thesis, MIT, Nov. 8, 1990.	

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